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ABSTRACT

This competency-based module uses the Ocean County (New Jersey) Vocational-Technical Schools curriculum-infused model for infusing basic skills instruction into vocational education. The model demonstrates the relationship of vocational skills to communication, mathematics, and science. The document begins with a philosophy statement; preface; a table that explains the number of hours required for academic credit in various programs and the number of those hours that are devoted to basic skills and vocational activities; matrices that show in which courses specific basic skills are taught; a list of objectives; and an explanation of student activities. Most pages in the document are tables that describe the relationship of vocational skills to basic skills within the auto body repair program. These pages are organized by instructional unit and the topics within them. For each topic and associated task(s) are listed the theories and the communication, math, and science skills covered. Also listed are the expected student outcomes. The instructional units included are: orientation; career orientation; safety; fasteners; measurement; conditioning the car finish; prepare auto for work; refinish the automobile; repair minor body damage; repair major body damage; welding (electric); oxyacetylene equipment and procedures; paint problems and cures; automotive glass; fiberglass repair; plastic body panels; automotive mechanicals; electrical components; and estimating. (CML)

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Competency Based Vocational Curricula

COM-LINK

With Basic Skills And Academic Linkages

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In Cooperation With The

New Jersey State Department of Education

Division of Vocational Education

And

Ocean County Vocational-Technical School

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Ocean County Vocational-Technical School

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PHILOSOPHY OF EDUCATION

The Ocean County Vocational-Technical Education Program should consist of those courses, activities and experiences which are designed to prepare students for a successful entrance in a given field of work. The program should be based upon an analysis of the worker needs of the field of work, the opportunities and requirements for entrance, and the particular characteristics and needs of the students.

We believe that:

The school should educate and train the students to live effectively in our ever-changing world.

The school should provide, for each student, intensive training toward general and specific job objectives, and setting standards of performance in keeping with the requirements of that particular field of work.

All students should evidence the interest, aptitude, and ability to profit from the specialized instruction, and this should be a condition of entrance into or continuance in a given field of work.

Equal attention should be given in the school program to develop sound character, good citizenship, ability to think critically, and maintain good mental and physical health.

The school must be constantly striving to fulfill its ultimate purpose; that of serving the students and the community. The school should give careful consideration to the needs, interests, and capacities of the students and the educational and technical background, experience, training, and professional interest of the professional staff as they develop a working philosophy of education.

PREFACE

The curriculum format employed by this project is competency based and utilizes the Ocean County Vocational-Technical Schools' curriculum infused model for the teaching of basic skills as part of vocational education. The design demonstrates the relationship of vocationally related skills to communication, mathematics and science knowledge. Proficiences with regard to student outcomes cannot be achieved without mastery in related academic areas. All student outcome objectives are predicated upon entry level skills which reflect the dictates of the job marketplace and industry. In addition, basic skills matrices developed by the district are included. The totality of this package is designed to facilitate the vocational teaching process and to enchance the learning experiences of our students.

POTENTIAL OPPORTUNITY FOR AWARDING ACADEMIC CREDITS FOR STUDENTS AT OCEAN COUNTY VOCATIONAL-TECHNICAL SCHOOL

450 hours - 1 year course at O.C.V.T.S.
900 hours - 2 year course at O.C.V.T.S.
1000 hours - 2 year Beauty Culture course

120 hours per year needed for 5 credits
60 hours per year needed for 2½ credits

COURSE	TOTAL HOURS	HOURS SPENT ON COMMUNICATION SKILLS	HOURS SPENT ON COMPUTATION SKILLS	HOURS SPENT ON SCIENCE	TIME ON OCCUPATIONAL ACTIVITIES IN CLASS OR SHOP
AIR CONDITIONING, REFRIGERATION AND HEATING	900	140	120	120	520
AUTO BODY REPAIR	900	130	120	125	525
AUTOMOTIVE MECHANICS	900	150	120	120	510
AUTOMOTIVE AND DIESEL ENGINE REBUILDING	900	216	126	125	433
BEAUTY CULTURE I AND II	1000	240	120	130	515
BUILDING TRADES	900	135	120	130	515
BUSINESS RELATIONS - MEDIA/MODELING	450	200	60	40	150
CHILD CARE AIDE	900	240	120	122	418
COMMERCIAL ART AND PRINTING	900	120	215	75	580
COMMERCIAL BUILDING CONSTRUCTION (MASONRY)	900	130	125	130	515

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120 hours per year needed for 5 credits
60 hours per year needed for 2½ credits

COURSE	TOTAL HOURS	HOURS SPENT ON COMMUNICATION SKILLS	HOURS SPENT ON COMPUTATION SKILLS	HOURS SPENT ON SCIENCE	TIME ON OCCUPATIONAL ACTIVITIES IN CLASS OR SHOP
COMMERCIAL PHOTOGRAPHY & TELEVISION PRODUCTION	900	150	125	80	545
CUSTOM CABINETMAKING	900	130	120	60	590
DENTAL ASSISTING	450	168	65	77	140
DESIGN DRAFTING	900	135	150	165	450
ELECTRICAL TRADES	900	106	120	124	550
FASHION MERCHANDISING	450	200	60	40	150
FOOD SERVICES	900	206	132	125	437
INDUSTRIAL AUTOMATION AND ELECTRONICS	900	129	140	132	499
INTERIOR DESIGN	900	210	130	120	440
LANDSCAPING AND GREENHOUSE TECHNOLOGY	900	125	125	175	475

POTENTIAL OPPORTUNITY FOR AWARDING ACADEMIC CREDITS FOR STUDENTS AT OCEAN COUNTY VOCATIONAL-TECHNICAL SCHOOL

450 hours - 1 year course at O.C.V.T.S.
900 hours - 2 year course at O.C.V.T.S.
1000 hours - 2 year Beauty Culture course

120 hours per year needed for 5 credits
60 hours per year needed for 2½ credits

COURSE	TOTAL HOURS	HOURS SPENT ON COMMUNICATION SKILLS	HOURS SPENT ON COMPUTATION SKILLS	HOURS SPENT ON SCIENCE	TIME ON OCCUPATIONAL ACTIVITIES IN CLASS OR SHOP
MARINE ENGINE AND BOAT SERVICES	900	164	120	125	491
MEDICAL OFFICE RECEPTIONIST/ASSISTANT	450	173	60	77	140
MEDICAL SKILLS AND RELATED HEALTH CAREERS	450	135	65	125	125
MEDICAL SKILLS (ADVANCED)	450	125	60	125	140
PLUMBING AND HEATING	900	140	120	120	520
RECREATIONAL VEHICLE MAINTENANCE AND REPAIR	900	125	130	60	585
T.V. AND COMPUTER REPAIR	900	125	150	175	450
WELDING	900	135	120	100	545

COMMUNICATION SKILLS

Listed below are all courses offered at the Ocean County Vocational-Technical School. The asterisk indicates that the topic is studied in that curriculum.

COURSE	Functional Reading Skills	Vocabulary	Identifying Main Ideas	Meanings in Context	Inferences	Fact/Opinion Distinction	Signal Words	Parts of Text-book/Manual	Following Directions	Outlining and Note Taking	Interpretation of Maps and Graphs	Interpretation of Diagrams	Test Taking Skills	Expository Writing Skills	Problem Solving	Spelling	Oral Communications	Study Skills	Resume Writing	Job Application Skills
AIR CONDITIONING, REFRIGERATION AND HEATING	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AUTO BODY REPAIR	*	*		*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
AUTOMOTIVE MECHANICS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AUTOMOTIVE AND DIESEL ENGINE REBUILDING	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BEAUTY CULTURE I AND II	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BUILDING TRADES	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
BUSINESS RELATIONS - MEDIA/MODELING/TRAVEL	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*
CHILD CARE AIDE	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
COMMERCIAL ART AND PRINTING CAREERS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMERCIAL BUILDING CONSTRUCTION (MASONRY)	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
COMMERCIAL PHOTOGRAPHY AND TELEVISION PRODUCTION	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CUSTOM CABINETMAKING	*	*		*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
DENTAL ASSISTING	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*

COMMUNICATION SKILLS - CONTINUED

COURSE	Functional Reading Skills	Vocabulary	Identifying Main Ideas	Meanings in Context	Inferences	Fact/Opinion Distinction	Signal Words	Parts of Text-book/Manual	Following Directions	Outlining and Note Taking	Interpretation of Maps, Graphs and Charts	Interpretation of Diagrams	Test Taking Skills	Expository Writing Skills	Problem Solving	Spelling	Oral Communications	Study Skills	Resume Writing	Job Application Skills
DESIGN DRAFTING	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ELECTRICAL TRADES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FASHION MERCHANDISING	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
FOOD SERVICES	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
INDUSTRIAL AUTOMATION AND ELECTRONICS	*	*	*		*	*			*	*	*	*	*	*	*	*	*	*	*	*
INTERIOR DESIGN	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
LANDSCAPING AND GREENHOUSE TECHNOLOGY	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
MARINE ENGINE AND BOAT SERVICE	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MEDICAL OFFICE RECEPTIONIST/ASSISTANT	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
MEDICAL SKILLS AND RELATED HEALTH CAREERS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MEDICAL SKILLS (ADVANCED)	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
PLUMBING AND HEATING	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RECREATIONAL VEHICLE MAINTENANCE AND REPAIR	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
T.V. AND COMPUTER REPAIR	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
WELDING	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

MATHEMATICS SKILLS

Listed below are all courses offered at the Ocean County Vocational-Technical School. The asterisk indicates that the topic is studied in that curriculum.

COURSE	Whole Numbers	Common Fractions	Decimals	Percentages	Weights and Measurements	Ratio and Proportion	Powers and Roots	Formulas	Estimating	Geometry	Basic Trigonometric Functions	Graphs
AIR CONDITIONING, REFRIGERATION AND HEATING	*	*	*	*	*	*	*	*	*	*	*	*
AUTO BODY REPAIR	*	*	*	*	*	*	*	*	*	*		*
AUTOMOTIVE MECHANICS	*	*	*	*	*	*	*	*	*			*
AUTOMOTIVE AND DIESEL ENGINE REBUILDING	*	*	*	*	*	*	*	*	*	*		*
BEAUTY CULTURE I AND II	*	*	*	*	*	*	*	*	*	*	*	*
BUILDING TRADES	*	*	*	*	*	*	*	*	*	*	*	*
BUSINESS RELATIONS - MEDIA/MODELING/TRAVEL	*		*	*		*			*			*
CHILD CARE AIDE	*	*	*	*	*	*		*	*	*	*	*
COMMERCIAL ART AND PRINTING CAREERS	*	*	*	*	*	*		*	*	*		*
COMMERCIAL BUILDING CONSTRUCTION (MASONRY)	*	*	*	*	*	*	*	*	*	*	*	*
COMMERCIAL PHOTOGRAPHY AND TELEVISION PRODUCTION	*	*	*	*	*	*	*	*	*	*	*	*
CUSTOM CABINETMAKING	*	*	*	*	*	*	*	*	*	*	*	*
DENTAL ASSISTING	*	*	*	*	*	*		*	*			*

MATHEMATICS SKILLS - CONTINUED

COURSE	Whole Numbers	Common Fractions	Decimals	Percentages	Weights and Measurements	Ratio and Proportion	Powers and Roots	Formulas	Estimating	Geometry	Basic Trigonometric Functions	Graphs
DESIGN DRAFTING	*	*	*	*	*	*		*	*	*	*	*
ELECTRICAL TRADES	*	*	*	*	*	*	*	*	*	*	*	*
FASHION MERCHANDISING	*	*	*	*	*	*		*	*	*		*
FOOD SERVICES	*	*	*	*	*	*		*	*	*		*
INDUSTRIAL AUTOMATION AND ELECTRONICS	*	*	*	*	*	*		*	*	*	*	*
INTERIOR DESIGN	*	*	*	*	*	*		*	*	*		*
LANDSCAPING AND GREENHOUSE TECHNOLOGY	*	*	*	*	*	*		*	*	*	*	*
MARINE ENGINE AND BOAT SERVICE	*	*	*	*	*	*		*			*	*
MEDICAL OFFICE RECEPTIONIST/ASSISTANT	*	*	*	*	*	*	*	*	*	*		*
MEDICAL SKILLS AND RELATED HEALTH CAREERS	*	*	*	*	*	*		*	*	*	*	*
MEDICAL SKILLS (ADVANCED)	*	*	*	*	*	*		*	*	*	*	*
PLUMBING AND HEATING	*	*	*	*	*	*	*	*	*	*	*	*
RECREATIONAL VEHICLE MAINTENANCE AND REPAIR	*	*	*	*	*	*	*	*			*	*
T.V. AND COMPUTER REPAIR	*	*	*	*	*	*	*	*		*	*	*
WELDING	*	*	*	*	*	*		*	*	*	*	*

SCIENCE SKILLS

Listed below are all courses offered at the Ocean County Vocational-Technical School. Those listed as "Not Available" do not offer enough hours to qualify for credits in your high school. However, we have noted the skills covered. Those listed with an asterisk after the title are eligible. The asterisk indicates that the topic is studied in that curriculum.

	HUMAN ANATOMY						ASTRONOMY			CHEMISTRY			PHYSICS					ECOLOGY				
COURSE	Cellular Theory	Skeletal System	Muscles	System of Body	Diseases	Psychology	Solar System	Gravity	Weather	Matter	Chemical Reactions	Applied Chemistry	Light	Magnetism	Heat	Magnetism and Electricity	Nuclear Energy	Botany	Food Production	Fuels	Nutrition	Waste Disposal
AIR CONDITIONING, REFRIGERATION AND HEATING							*	*	*	*	*	*		*	*	*				*	*	
AUTO BODY REPAIR								*	*	*	*	*	*	*	*					*		*
AUTOMOTIVE MECHANICS								*		*	*	*	*	*	*	*				*		
AUTOMOTIVE DIESEL AND ENGINE REBUILDING								*		*	*	*		*	*	*	*			*		*
BEAUTY CULTURE I AND II	*	*	*	*	*	*				*	*	*	*		*	*					*	
BUILDING TRADES							*	*	*	*	*	*	*		*	*		*		*		
BUSINESS RELATIONS - MEDIA/MODELING/TRAVEL	N	* O	* T	* A	V	* A	I	L	A	B	L	E										
CHILD CARE AIDE	*	*	*	*	*	*			*		*	*		*	*			*	*		*	*
COMMERCIAL ART AND PRINTING CAREERS	N	O	T	A	V	A	I	* L	A	* B	* L	* E	*		*	*						*
COMMERCIAL BUILDING CONSTRUCTION (MASONRY)	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*		*		*	*	*
COMMERCIAL PHOTOGRAPHY AND TELEVISION PRODUCTION	N	O	T	A	V	* A	I	* L	A	* B	* L	* E	*		*	*						*
CUSTOM CABINETMAKING	* N	O	T	A	V	A	I	* L	A	* B	* L	* E			*			*				
DENTAL ASSISTING	*	*	*	*	*	*				*	*	*	*								*	*

SCIENCE SKILLS - CONTINUED

	HUMAN ANATOMY						ASTRONOMY			CHEMISTRY			PHYSICS					ECOLOGY				
COURSE	Cellular Theory	Skeletal System	Muscles	System of Body	Diseases	Psychology	Solar System	Gravity	Weather	Matter	Chemical Reactions	Applied Chemistry	Light	Magnetism	Heat	Magnetism and Electricity	Nuclear Energy	Botany	Food Production	Fuels	Nutrition	Waste Disposal
DESIGN DRAFTING							*	*	*	*		*	*		*	*	*			*		*
ELECTRICAL TRADES							*	*	*	*	*		*	*	*	*	*		*			
FASHION MERCHANDISING	*	*	*	*		*		*		*	*	*	*								*	
FOOD SERVICES					*	*		*	*		*	*	*		*				*		*	*
INDUSTRIAL AUTOMATION AND ELECTRONICS								*		*			*	*	*	*	*			*		
INTERIOR DESIGN		*	*			*	*	*	*	*	*	*	*		*	*						
LANDSCAPING AND GREENHOUSE TECHNOLOGY							*	*	*		*	*	*		*	*		*	*	*	*	*
MARINE ENGINE AND BOAT SERVICE								*	*	*	*	*	*	*	*	*		*		*		
MEDICAL OFFICE RECEPTIONIST/ASSISTANT	N	* O	* T	* A	* V	* A	I	L	A	B	* L	E										*
MEDICAL SKILLS AND RELATED HEALTH CAREERS	*	*	*	*	*	*		*		*	*					*			*		*	*
MEDICAL SKILLS (ADVANCED)	*	*	*	*	*	*		*		*	*					*			*		*	*
PLUMBING AND HEATING					*		*	*	*	*	*	*			*	*		*		*		*
RECREATIONAL VEHICLE MAINTENANCE AND REPAIR	N	O	T	A	V	A	I	* L	A	* B	* L	* E	*	*	*	*				*		*
T.V. AND COMPUTER REPAIR										*	*	*	*	*	*	*				*		
WELDING								*		*	*	*	*	*	*	*				*		

COURSE OBJECTIVES

1. To prepare students with entry level skills, abilities and knowledge for employment in the auto body repair trade.

2. To present 900 hours of instruction and practice in the auto body repair trade in accordance with the course curriculum and skill profile outline.

3. To provide a detailed summary evaluation of the proficiency achieved by each student representing the most important content areas presented in the auto body repair trade skill profile.

4. To help each student develop positive attitudes and ideals related to their occupation in the auto body repair trade and understand their own capabilities and potential.

5. To instill in each student the need to plan for their professional growth through continuous learning in their chosen occupation.

STUDENT ACTIVITIES

All students enrolled in the Ocean County Vocational-Technical School are encouraged to join Vocational Industrial Clubs of America (VICA). Student activities are infused into each program. Each building has a student government and a student activities program separate from VICA. Additionally, students from each center and every class are encouraged to participate in the VICA Leadership and Job Demonstration Contests which begin in the centers and radiate throughout the district as Ocean County Vocational-Technical School inter school winners are chosen.

Student activities emphasize the basic precepts of VICA, as well as the basic tenets of democracy. Within the context, each of our programs teaches the dignity of work, high standards in trade ethics and safety, and a belief in the free enterprise economic system.

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UNIT: ORIENTATION

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. School rules and regulations	A. Student rights and responsibilities B. Student grievance procedures C. Student expectations D. School code of discipline E. Attendance and graduation policy F. Student transfers G. Grading system H. Accidents I. Bedside instruction J. Cooperative Industrial Education (C.I.E.) K. Driving policy L. Drug and alcohol policy M. Early dismissal procedures N. Lockers O. Driver permits P. School closing procedures Q. Smoking R. Student progress reports S. Telephones T. Theft U. Tools and equipment V. Vocational Industrial Clubs of America (VICA)	A. Note taking B. Filling out forms C. Oral communication D. Test taking skills E. Functional reading skills (Student Handbook)			A. The student will know what is expected of him/her for the school year in order to promote effective learning conditions Written test B. The student will know the standards to be met within the school and classroom Written test

UNIT: ORIENTATION - CONTINUED

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
II. Student contract	A. Attendance B. Request for make-up work C. Extra help with assignments or lessons D. Homework assignments E. Requirements for each marking period (practical assignment sheet) F. Notebooks, etc. G. Field trips H. Passing test grades I. Daily grading system J. Lockers K. Daily cleaning duties	A. Outlining and note taking B. Filling out forms C. Oral communications D. Test taking skills E. Functional reading skills (Student Contract)			A. The student will know what is expected of him/her for the school year in order to promote effective learning conditions Written test B. The student will know the standards to be met within the school and classroom Written test

UNIT: CAREER ORIENTATION

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Explain why the need for automotive service is increasing II. Identify major types of automotive career opportunities III. Explain apprenticeship and union employment IV. Identify variety of jobs available in the auto industry V. Describe duties of specialized careers	A. Automobile services are increasing due to several factors, among which are the increasing complexity of the technology involved, the increased average of vehicles and the need to meet the needs of fuel economy and emission controls B. There are many types of careers that are meeting the needs of the automobile industry, including firms involved in the manufacturing, sales and service of automobiles C. There are a wide variety of jobs in the auto industry, including jobs for general mechanics to combination body repairman to specialized areas (alignment of steering parts, glass installer, upholsterer, painter, parts manager, estimator and welder)	A. Functional reading skills B. Vocabulary C. Parts of textbook/manual D. Outlining and note taking E. Test taking skills F. Writing skills G. Spelling H. Oral communications I. Study skills			A. The student will be able to demonstrate a knowledge of the reasons for the increased needs in the automotive service industry B. The student will be able to describe the major career opportunities C. The student will be able to pass a written test on automotive career opportunities

UNIT: SAFETY

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Demonstrate a knowledge of safe working habits, attitude and proper shop procedures	A. Knowledge of shop layout B. Location of safety devices C. Fire drill procedures and exits D. Identification of hazards in the work area	A. Functional reading skills B. Vocabulary C. Parts of textbook/manual D. Signal words E. Following directions F. Outlining and note taking G. Test taking skills H. Writing skills I. Spelling J. Oral communications K. Study skills		A. Chemical reactions B. Heat C. Fuels D. Waste disposal	A. The student will be able to demonstrate an ability to perform in a manner that will protect him/herself and others in the shop B. The student will be able to pass a written test
II. Proper use of hand tools	A. Proper selection of the correct hand tool for the job B. Safe and correct use of that hand tool C. Do's and Don'ts D. Standard or metric E. Make simple repairs of hand tools	A. Functional reading skills B. Vocabulary C. Parts of textbook/manual D. Signal words E. Following directions F. Outlining and note taking G. Test taking skills H. Writing skills I. Spelling J. Oral communications K. Study skills L. Problem solving	A. Whole numbers B. Common fractions C. Metric conversion D. Torque E. Rule graduations	A. Energy B. Force C. Physics	A. The student will be able to identify various hand tools B. The student will be able to describe hand tools C. The student will be able to perform safely with hand tools D. The student will be able to repair hand tools

UNIT: SAFETY - CONTINUED

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
III. Proper use of power tools	A. Description of shop power tools 1. Pneumatic 2. Electric 3. Hydraulic B. Proper procedure for safe operation C. Simple repairs	A. Functional reading skills B. Vocabulary C. Parts of textbook/manual D. Following directions E. Outlining and note taking F. Writing skills G. Spelling H. Oral communications	A. Weights and measures B. Ratio	A. Energy B. Gravity C. Physics D. Force E. Vector principles	A. The student will be able to identify various power tools and describe operating cautions B. The student will be able to perform with power tools C. The student will be able to make repairs to power tools D. The student will be able to pass a written test
IV. Floor jack, lifts, hoists and jackstands	A. Proper procedure using various types of lifting and support devices B. Knowledge of where, when and why to use equipment	A. Functional reading skills B. Vocabulary C. Following directions D. Writing skills E. Spelling F. Note taking G. Oral communications	A. Weights B. Ratio	A. Energy B. Gravity C. Physics D. Force E. Principles of air over hydraulic jacks F. Principles of electric over hydraulic lifts	A. The student will be able to identify lift, jacking or holding equipment and describe operating cautions B. The student will be able to perform using lift, jacking and holding equipment C. The student will be able to pass a written test on equipment
V. Chemicals	A. Knowledge of chemical hazards B. Identify chemicals C. Proper use of chemicals D. Proper disposal of chemicals E. Propor storage of chemicals F. Use of material - safety data sheets G. Safety bulletins from manufacturers H. Safety speakers from Snap-On Tool Company I. Safety speaker from Dover Township Fire Department J. Good housekeeping	A. Functional reading skills B. Writing skills C. Following directions D. Labeling E. Note taking F. Spelling G. Oral communications H. Vocabulary	A. Percentage B. Volume C. Weights D. Ratios E. Whole numbers F. Fractions	A. Fire B. Toxic and nontoxic fumes C. Chemical compounds	A. The student will be able to identify chemicals B. The student will be able to safely use chemicals C. The student will be able to properly dispose of chemicals D. The student will be able to find chemicals in MSDS sheets for emergency data E. The student will be able to demonstrate good housekeeping skills

UNIT: FASTENERS

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Automotive type fasteners	A. Describe fasteners used in the automotive field B. Properly identify fasteners, their functions, capabilities and limitations C. Repair or replacement of fasteners	A. Functional reading skills B. Vocabulary C. Parts of textbook/manual D. Following directions E. Note taking F. Writing skills G. Spelling H. Oral communications I. Hand-eye coordination	A. Whole numbers B. Fractions C. Metric D. Torque	A. Tensile strength B. Quality of C. Oxidation D. Age E. Plastics	A. The student will be able to identify various fasteners B. The student will be able to remove and install various fasteners C. The student will be able to pass a written test

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Measuring dimensions	A. Two systems of measurement 1. USCS 2. Metric B. Using reference charts and manuals for frame and unibody dimensions	A. Functional reading skills B. Writing skills C. Oral communications D. Problem solving E. Following directions	A. Whole numbers B. Fractions C. Metric D. Ratio E. Length (linear) F. Conversion tables G. Addition H. Subtraction	A. Mechanical measurement B. Optical measurement C. Laser	A. The student will be able to demonstrate an understanding of the measurement system in U.S. standard and metric B. The student will be able to use manuals and reference materials for direction C. The student will be able to use measuring devices for proper strength
II. Measuring liquids	A. Knowledge of liquid measure B. Sizes of different containers C. Looks of different containers	A. Functional reading skills B. Writing skills C. Oral communications D. Following directions E. Product manual F. Label G. Vocabulary	A. Whole numbers B. Fractions C. Ratio D. Volume		A. The student will be able to identify and use quart, pints and gallon containers B. The student will be able to explain ounces of measure

UNIT: CONDITIONING THE CAR FINISH

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Waxing	A. Function of wax to the painted surface B. Types of wax products C. Application of wax products D. Removal of wax products	A. Functional reading skills B. Writing skills C. Oral communications D. Note taking skills E. Labels	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Amount	A. Chemical reactions B. MSDS	A. The student will be able to explain the painted surface of the auto B. The student will be able to choose the proper wax product for the finish C. The student will be able to apply and remove the product to trade standards
II. Compounds and polish, restore painted surface	A. Function of compounds 1. Grits 2. Water base 3. Oil base B. Function of polish C. Application of compound and polish to old finish D. Application of compounds and polish to new finish	A. Functional reading skills B. Writing skills C. Oral communications D. Note taking E. Labels	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Amount	A. Chemical reactions B. Oxidation C. MSDS	A. The student will be able to select the proper compound and polish for the finish B. The student will be able to apply and remove compounds and polishes to trade standards
III. Cleans interior and exterior surfaces	A. Types of surfaces 1. Plastics 2. Vinyls 3. Metal 4. Paint B. Types of cleaning solvents C. Beware of hazardous solvents D. Explain stains to be removed	A. Functional reading skills B. Writing skills C. Oral communications D. Note taking skills E. Labels	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Amount	A. Chemical reactions B. MSDS	A. The student will be able to identify the surface to be cleaned B. The student will be able to identify the solvent to be used on the surface C. The student will be able to apply cleaner to trade standards

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
IV. Detailing	A. Diagnose causes of deterioration B. Types of paint finishes C. Techniques of paint touch-up D. Finish tips of windows and tires	A. Functional reading skills B. Writing skills C. Oral communications D. Note taking skills E. Labels	A. Whole numbers B. Fractions C. Percentages D. Ratios E. Amount F. Volume	A. Chemical reactions B. MSDS C. Sunlight	A. The student will be able to identify deteriorated paint finish B. The student will be able to touch up paint to trade standards C. The student will be able to clean windows and tires to trade standard
V. Rustproofing	A. Explain rustproofing B. Field trip	A. Functional reading skills B. Writing skills C. Oral communications D. Note taking skills	A. Whole numbers B. Fractions C. Percentages	A. Chemical reactions B. MSDS C. Sunlight D. Winter	A. The student will be able to explain rustproofing B. The student will be able to pass a written test

UNIT: PREPARE AUTO FOR WORK

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Develop the work plan	A. Diagnose damage B. Check list of parts needed C. Knowledge of repair manuals (if available) D. Find storage area for parts E. Storage/care of nuts and bolts removed from damaged parts F. Selection of hand and power tools for parts removal	A. Functional reading skills B. Writing skills C. Oral communications D. Parts of textbook/manual E. Note taking	A. Whole numbers B. Fractions C. Metric	A. Torque B. Hardness of bolts C. Leverage	A. The student will be able to develop a work plan for a project B. The student will be able to check all parts for the project C. The student will be able to remove all damaged parts D. The student will be able to store all parts for the project E. The student will be able to make the proper selection of hand and power tools for parts removal

UNIT: REFINISH THE AUTOMOBILE

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Surface preparation	A. Steps of surface preparation 1. Wash with soap and water 2. Dewax 3. Sand 4. Blow off 5. Mask 6. Final wash 7. Tack wipe B. Knowledge of cleaning solvents (hazards) C. Selection of sandpaper D. Bare metal conditioning systems E. Other substrate priming systems	A. Functional reading skills B. Writing skills C. Oral communications D. Labels E. Note taking	A. Whole numbers B. Fractions C. Percentages D. Ratio E. Graphs	A. Chemical reactions of solvents and acids B. Silca sandpaper C. Aluminum oxide paper D. MSDS sheets	A. The student will be able to demonstrate a knowledge of the proper steps for surface preparation B. The student will be able to demonstrate a knowledge of the safe handling of acids and solvents during surface preparation C. The student will be able to select the proper grit sandpaper for surface preparation
II. Mixing paints and primers	A. Types of primers, primer surfaces and sealers for lacquers and enamels B. Selection of special additives for painted surfaces, plastic and rubber body panels C. Reduction for each paint product D. Application of primers E. Advantages and disadvantages of paint additives	A. Functional reading skills B. Writing skills C. Oral communications D. Parts of textbook/manual E. Note taking F. Labels	A. Whole numbers B. Fractions C. Percentages D. Ratio E. Amount F. Volume G. Graphs	Chemical reactions	A. The student will be able to explain the difference between lacquer, enamels, primer and sealers B. The student will be able to select the proper additive for plastic or rubber body panels C. The student will be able to mix and apply the paint product

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
III. Spray lacquer finishes	A. Types of lacquer finish B. Reduction of lacquer paint C. Special additives D. Application and spray techniques of lacquer paint products	A. Functional reading skills B. Writing skills C. Oral communications D. Parts of textbook/manual E. Note taking F. Labels	A. Whole numbers B. Fractions C. Percentages D. Ratios E. Amount F. Sizes G. Graphs	A. Chemical reactions B. Heat C. Air D. MSDS sheets	A. The student will be able to identify lacquer paint products B. The student will be able to reduce and apply lacquer paint products using trade techniques
IV. Spray enamel finishes	A. Types of enamel finishes B. Reduction of enamel paint products C. Special additives D. Application and spray techniques of enamel paint products	A. Functional reading skills B. Writing skills C. Oral communications D. Parts of textbook/manual E. Note taking F. Labels	A. Whole numbers B. Fractions C. Percentages D. Ratios E. Amount F. Sizes G. Graphs	A. Chemical reactions B. Heat C. Air D. MSDS sheets	A. The student will be able to identify enamel paint products B. The student will be able to reduce and apply enamel paint products using trade techniques
V. Masking	A. Types of masking tapes B. Types of masking papers C. Proper application and masking techniques	A. Functional reading skills B. Writing skills C. Oral communications D. Parts of textbook/manual E. Note taking F. Labels	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Amount	A. Glues B. Chemical reactions C. Chemical coatings	A. The student will be able to identify masking tape and paper for application B. The student will be able to apply masking tape to trade standards

UNIT: REPAIR MINOR BODY DAMAGE

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Small dents	A. Analyze damage and determine methods of correction B. Proper use and selection of hand tools C. Proper use and operation of power tools D. Techniques of recontouring metal	A. Functional reading skills B. Writing skills C. Oral communications D. Note taking	A. Whole numbers B. Fractions C. Percentages D. Ratio E. Sizes	A. Metallurgy B. Hydraulics	A. The student will be able to analyze body damage B. The student will be able to select the proper hand and power tools C. The student will be able to demonstrate the proper operation of hand and power tools D. The student will be able to demonstrate recontouring of metal
II. Body fillers	A. Types of body fillers B. Mix (activate) body fillers C. Application of body fillers D. Contouring body fillers E. Final smoothing of body fillers	A. Functional reading skills B. Writing skills C. Oral communications D. Note taking E. Labels F. Following directions	A. Whole numbers B. Fractions C. Percentages D. Ratio E. Sizes F. Amount	Chemical reactions	A. The student will be able to identify body fillers B. The student will be able to mix and apply body filler to trade standards C. The student will be able to contour and smooth to trade standards
III. Body panel alignment	A. Identify body panels B. Analyze damage and determine methods of correction C. Straighten body panel to original contour of the manufacturer using body hammers and body dollys	A. Functional reading skills B. Writing skills C. Oral communications D. Note taking E. Following directions	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Metric	Metallurgy	A. The student will be able to identify body panels B. The student will be able to determine the correction procedures to be used C. The student will be able to straighten body panel to manufacturer specifications using hammers and dollys

UNIT: REAPIR MAJOR BODY DAMAGE

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Align body panels to manufacturer specifications for frame type automobiles	A. Use of frame gauges to determine the extent of frame and under body damage of the automobile B. Analyze damage conditions for repair methods C. Operate push and pull body alignment equipment D. Align replacement body panels of the automobile to manufacturer specifications	A. Functional reading skills B. Writing skills C. Oral communications D. Note taking E. Following directions	A. Whole numbers B. Fractions C. Percentages D. Metric E. Sizes F. Measuring	A. Metallurgy B. Heat	A. The student will be able to determine frame damage B. The student will be able to analyze the damage and describe repair methods C. The student will be able to operate body alignment equipment D. The student will be able to align body panels to manufacturer specifications
II. Align body panels to manufacturer specifications for unibody automobiles	A. Black Hawk science of unibody repair B. History and operation of collision damage repair equipment C. Manufacturer bulletins for technical reference	A. Functional reading skills B. Writing skills C. Oral communications D. Note taking E. Following directions	A. Whole numbers B. Fractions C. Percentages D. Metric E. Sizes F. Measuring	A. Metallurgy B. Heat	A. The student will be able to determine unibody damage B. The student will be able to analyze the damage and describe repair methods C. The student will be able to set up unibody repair equipment D. The student will be able to operate unibody repair equipment E. The student will be able to align body panels to manufacturer specifications using unibody repair equipment

UNIT: WELDING (ELECTRIC)

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Metallic inert gas welding (M.G.I.)	A. Types of equipment B. Types of metal C. Welding theory D. Safety E. Setting up equipment F. Safety exam	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Following directions F. Note taking G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	A. Heat B. Metallurgy C. Properties of argon and carbon dioxide gases	A. The student will be able to identify types of equipment B. The student will be able to identify types of metal to be welded C. The student will be able to demonstrate and set up welding technology D. The student will be able to pass a written test with 70% accuracy
II. Resistance spot welding	A. Operation of resisting spot welding equipment B. Types of metal	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Following directions F. Note taking G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	A. Heat B. Metallurgy	A. The student will be able to set up resistant spot welder B. The student will be able to demonstrate the operation of the resistant spot welder
III. Plasma arc cutting	A. Function of plasma arc cutting B. Operation of flame arc cutting C. Set up equipment D. Types of metal to use plasma arc cutting	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Following directions F. Note taking G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	A. Heat B. Metallurgy	A. The student will be able to set up the plasma cutter B. The student will be able to operate the plasma cutter

UNIT: OXYACETYLENE EQUIPMENT AND PROCEDURES

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Understanding oxyacetylene equipment	A. Characteristics of oxygen and acetylene gases B. Oxygen and acetylene cylinders C. Regulators D. Hoses E. Torches and tips F. Safety G. Setting up the equipment H. Safety exam	A. Functional reading skills B. Vocabulary C. Fact/Opinion distinction D. Parts of textbook/manual E. Following directions F. Outlining and note taking G. Spelling H. Oral communications I. Test taking skills	A. Whole numbers B. Fractions C. Sizes D. Percentages E. Ratio F. Graphs	A. Heat B. Metallurgy C. Properties of oxygen and acetylene	A. The student will be able to delineate the properties of oxygen B. The student will be able to delineate the construction, use and safety hazards of oxygen and acetylene cylinders C. The student will be able to differentiate between oxygen and acetylene hoses and regulators D. The student will be able to identify parts of welding and cutting torches E. The student will be able to delineate the do's and don'ts regarding the use of an oxyacetylene outfit F. The student will be able to demonstrate the proper set up, lighting and tear down of oxyacetylene equipment

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
II. Adjusting and testing flames	Neutral, carbonizing and oxidizing flames	A. Functional reading skills B. Vocabulary C. Fact/Opinion distinction D. Parts of textbook/manual E. Following directions F. Outlining and note taking G. Spelling H. Oral communications I. Test taking skills	A. Whole numbers B. Fractions C. Sizes D. Percentages E. Ratio F. Graphs	A. Heat B. Metallurgy C. Characteristics of various flames	The student will be able to light a welding torch and set flame to oxidizing carbonizing and neutral patterns
III. Fusion welding and brazing	A. Fusion welding sheet metal and steel plate 1. With filler rod 2. Without filler rod B. Brazing with bronze filler rod C. Selection of tip size versus thickness of material	A. Functional reading skills B. Vocabulary C. Fact/Opinion distinction D. Parts of textbook/manual E. Following directions F. Outlining and note taking G. Spelling H. Oral communications I. Test taking skills	A. Whole numbers B. Fractions C. Sizes D. Percentages E. Ratio F. Graphs	A. Heat B. Metallurgy C. Characteristics of various flames	A. The student will be able to demonstrate a fusion weld of mild steel materials B. The student will be able to demonstrate bronze brazing of mild steel material C. The student will be able to select proper tip size

UNIT: OXYACETYLENE EQUIPMENT AND PROCEDURES - CONTINUED

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
IV. Flame cutting	Flame cutting of mild steel plate - 1/32" to 1/4"	A. Functional reading skills B. Vocabulary C. Fact/Opinion distinction D. Parts of textbook/manual E. Following directions F. Outlining and note taking G. Spelling H. Oral communications I. Test taking skills	A. Whole numbers B. Fractions C. Sizes D. Percentages E. Ratio F. Graphs	A. Chemical reaction between heated steel and pure oxygen B. Metallurgy	A. The student will be able to demosntrate the flame cutting (burning) of a steel plate B. The student will be able to select the proper cutting tip
V. Passing a written test	Specific test instructions	A. Vocabulary B. Signal words C. Following directions D. Test taking skills E. Spelling F. Functional reading skills			The student will be able to pass a written test with 70% accuracy

UNIT: PAINT PROBLEMS AND CURES

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Paint problems	A. Diagnose paint problems from visual inspection B. Correct paint problems with paint product from the manufacturer C. Proper techniques used for repair of paint problem	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Note taking F. Following directions G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	A. Chemical reactions B. Chemical compound C. MSDS D. Acids	A. The student will be able to identify paint problem by visual inspection B. The student will be able to correct paint problems using knowledge from the manufacturer paint guide C. The student will be able to utilize proper repair technique of paint problem

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Replace glass	A. Types of glass 1. Moveable 2. Stationary B. Wind and water repairs C. Adjustment techniques	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Note taking F. Following directions G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	A. Chemical reaction B. Adhesives	A. The student will be able to identify types of glass B. The student will be able to replace and adjust moveable glass C. The student will be able to install stationary glass D. The student will be able to locate and repair wind leaks E. The student will be able to locate and repair water leaks
II. Repair glass	Stationary glass repair	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Note taking F. Following directions G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	Chemical reaction	The student will be able to repair stationary glass with proper equipment

UNIT: FIBERGLASS REPAIR

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Repairing fiberglass	A. Determine types of fiberglass body panels B. Procedures of fiberglass repair C. Precautions of fiberglass repair	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Note taking F. Following directions G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	A. Chemical reaction (peroxide) B. Reinforcement structure	A. The student will be able to identify fiberglass panels B. The student will be able to repair fiberglass body panels C. The student will be able to use proper safety precautions of fiberglass repairs

UNIT: PLASTIC BODY PANELS

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
1. Repair and refinish automotive plastic panels - non-metal products	A. Determine types of non-metal products B. Thermo-setting a thermo-plastic resin body panel C. Glueing of plastic panels D. Procedure to refinish non-metal panels	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Note taking F. Following directions G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	A. Chemical identification B. Combustion C. Ultrasonically welded	A. The student will be able to identify types of non-metal products B. The student will be able to use proper repair techniques for non-metal panels C. The student will be able to refinish non-metal panels

UNIT: AUTOMOTIVE MECHANICALS

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Servicing mechanical parts	A. Contents and knowledge of mechanical components and their operation B. Basic auto mechanic knowledge C. Power-train removal of front wheel drives D. Power-train removal of rear wheel drives E. Electronic control module (emission control systems) F. Accessory system 1. Air conditioning 2. Heat 3. Power brakes 4. Power steering G. Safety precautions H. Wheel alignment	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Note taking F. Following directions G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	A. Metallurgy B. Chemicals - refrigeration C. Hydraulics 1. Friction 2. Heat D. Torque	A. The student will be able to identify mechanical components and desirable operation B. The student will be able to remove and install power train components using the proper hand tools C. The student will be able to locate and describe electronic control module D. The student will be able to service the following 1. Air conditioning 2. Heat 3. Power brakes 4. Power steering E. The student will be able to demonstrate safety precautions while working on accessory system

UNIT: ELECTRICAL COMPONENTS

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Troubleshoot electrical components	A. Knowledge of 12 volt electrical systems B. Technique to check for short circuit (test light) C. Wiring diagrams D. Commonly used electrical signs and symbols E. Color coding F. Wire size chart G. Fuse capacity chart	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Note taking F. Following directions G. Parts of textbook/manual I. Interpretation of diagrams and charts	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	A. Applied physics B. Properties of electricity	A. The student will be able to describe total electrical systems B. The student will be able to test and repair short circuits/cut wires C. The student will be able to follow electrical circuit on wiring diagram using color and wire size D. The student will be able to identify fuses

UNIT: ESTIMATING

TOPIC:

Task	Theory	Communication Skills	Mathematics Skills	Science Knowledge	Student Outcome
I. Estimating major body damage	A. Vehicle identification - number code B. Analyzing damage to convert to estimate repair time C. Determination of bench or traditional repair methods D. Automobile parts terminology	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Note taking F. Following directions G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	Physics	A. The student will be able to list components of identification number B. The student will be able to analyze damage for repair times C. The student will be able to complete a written estimate which includes damaged parts, labor, paint time and sales tax
II. Minor body damage	A. Analyze damaged area B. Basic restorative process C. Convert repair time and compute labor charges	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Note taking F. Following directions G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	Physics	A. The student will be able to prepare an estimate of needed repair which includes repair parts, labor, paint times and sales tax
III. Crash manuals	A. Identify vehicle parts by proper terminology B. Utilize crash manuals by proper estimate writing	A. Functional reading skills B. Vocabulary C. Writing skills D. Oral communications E. Note taking F. Following directions G. Parts of textbook/manual	A. Whole numbers B. Fractions C. Percentages D. Sizes E. Ratio F. Graphs	Physics	A. The student will be able to list parts of the automobile by proper terminology and sequence by the crash manual B. The student will be able to prepare an estimate of needed repair which includes damaged parts, labor, paint time and sales tax